2. Amendments to the Specification:

Please replace page 19 of the electronically submitted patent application with the following replacement page:

"points. One skilled in the art will recognize that other equations could also be used to calculate a single value representation of the current locations of the corner points. In an example embodiment, the corner index C is calculated in equation (3) as follows:

$$C = \sqrt{\frac{1}{8}\sum_{j=1}^{8}\sum_{k=1}^{3}[X_j(k) - Y_j(k)]^2} \qquad \text{Eq. (3)}$$

wherein X and Y are the x, y, z spatial locations of the corner points of the transformed image and the reference points (or the corner points from the untransformed image), k is used to index the x-, y- and z-components. The subscript j is used to index each of the 8 corner points. C is calculated via Eq. (3) for each iteration. In step 720, the calculate_convergence routine applies a low pass filter to the corner index to remove the noise and to provide a smooth estimate of the data. The example embodiment uses a causal low-pass filter that requires only data acquired previous to the current iteration. The low-pass value of the corner index at iteration i, $C_l(i)$, is calculated using a boxcar or similar type filter of length L_l is defined by equation (4) as follows:

$$C_l(i) = \frac{1}{L_l}\sum_{i-L_l}^{i} C(i) \qquad \text{Eq. (4)}$$

One skilled in the art will recognize that other low-pass filters may be implemented in place of the boxcar filter, for example a Hamming, Blackman or Bartlett filter can be employed. Alternatively, convergence may be determined without the use of a low-pass filter, for example, if the generated data is relatively smooth prior to any filtering.

In step 730, the calculate_convergence routine estimates the noise. In an alternate embodiment, an estimate of the noise $C_h(i)$ is obtained from a high-pass filtered version of the corner index which is calculated by equation (5) as follows:

$$C_h(i) = \sqrt{\frac{1}{L_h}\sum_{i-L_h}^{i}[C_l(j + L_h - 1) - C_j]^2} \qquad \text{Eq. (5)}$$

Where L_h is the window used to calculate the high-pass filter and (i) is the current iteration. The calculated noise is used, as discussed below with respect to equation 7, to insure that tested levels of convergence are not below the detectible range due to measurement noise. In step 740, the calculate_convergence routine estimates the slope"